

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-12 are pending in the present application. Claims 1-12 are amended by the present amendment.

In the outstanding Office Action, the drawings were objected to; the specification was objected to; Claim 6 was objected to; Claims 1-6 were rejected under 35 U.S.C. § 112, second paragraph; and Claims 1-6 were rejected under 35 U.S.C. § 103(a) as unpatentable over Lenhardt (U.S. Patent No. 4,708,762) in view of the Admitted Prior Art.

The drawings, specification and Claim 6 have been amended as requested in the Official Action. Claims 1-12 are further amended to more clearly describe and distinctly claim Applicants invention. Claims 1, 6, and 7 are further amended to recite “when the two glass sheets are on the first mechanical stage, the two glass sheets have at least vertical portions close to the second mechanical stage which are sucked, and when the two glass sheets are on the second mechanical stage, the two glass sheets have at least vertical portions close to the first mechanical stage which are sucked.” Support for this amendment is found in Applicants’ originally filed specification.¹ No new matter is added.

Briefly recapitulating, amended Claim 7 is directed to an apparatus for preparing a double glazing unit. The apparatus includes a die for injecting a resin material in a certain sectional shape, and a moving device for relatively moving the die and two glass sheets so as to move the die along a peripheral edge between the two glass sheets while supporting the two glass sheets so as to maintain a certain gap therebetween. A resin spacer is formed in the peripheral edge between the two glass sheets by carrying out the relative movement and

¹ Specification, page 31, lines 15-19.

injecting the resin material from the die. The apparatus comprises a first mechanical stage; and a second mechanical stage. The first mechanical stage is configured to have the two glass sheets put thereon first before forming the resin spacer. The second mechanical stage is configured to have the two glass sheets transferred thereon next. The die is movably provided between the first mechanical stage and the second mechanical stage in a vertical direction. The moving device includes a) a first guide provided on the first mechanical stage, said first guide configured to support lower edge surfaces of the glass sheets and to guide the glass sheets in a horizontal direction parallel to a glass sheet surface, and b) a second guide provided on the second mechanical stage, said second guide configured to support the lower edge surfaces of the glass sheets and to guide the glass sheets in the horizontal direction parallel to the glass sheet surface. A first holder is provided on the first mechanical stage and is in touch with faces of the two glass sheets that do not confront each other, and a second holder is provided on the second mechanical stage and is in touch with the faces of the two glass sheets that do not confront each other. The two glass sheets are moved in the horizontal direction parallel to the glass sheet surface and between the first mechanical stage and the second mechanical stage while maintaining the certain gap, before and/or during forming the resin spacer, by supporting the two glass sheets on the first mechanical stage in substantially vertical fashion by the first holder and supporting the two glass sheets on the second mechanical stage in substantially vertical fashion by the second holder. The die is moved in the vertical direction. The first holders are arranged so that when the two glass sheets are on the first mechanical stage, the two glass sheets have at least vertical portions close to the second mechanical stage sucked. The second holders are arranged so that when the two glass sheets are on the second mechanical stage, the two glass sheets have at least vertical portions close to the first mechanical stage sucked. Independent Claims 1 and 6 are directed to

alternative method embodiments of Applicants' invention. The present invention allows for spacer formation with improved accuracy.²

Lenhardt discloses a glass conveyer with separate supporting elements to support two glass plates. Applicants' Admitted Prior Art (APA) includes a plurality of suction pads held in substantially vertical fashion on rollers.³ However, both Lenhardt and APA fail to disclose a) first holders arranged so that when the two glass sheets are on the first mechanical stage, the two glass sheets have at least vertical portions close to the second mechanical stage sucked or b) second holders are arranged so that when the two glass sheets are on the second mechanical stage, the two glass sheets have at least vertical portions close to the first mechanical stage sucked.

As none of the cited prior art, individually or in combination, disclose or suggest all the elements of independent Claims 1, 6, and 7, Applicants submit the inventions defined by Claims 1, 6, and 7, and all claims depending therefrom, are not rendered obvious by the asserted prior art for at least the reasons stated above.⁴

² Specification, page 31, lines 6 to 19.

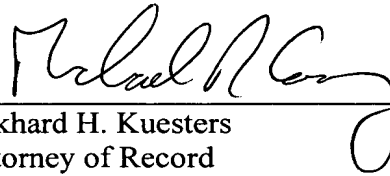
³ Specification, page 3, lines 14 to 21.

⁴ MPEP § 2142 "...the prior art reference (or references when combined) must teach or suggest **all** the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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